AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of listing of claims, and listing of claims in the application.

Listing of Claims

1. (Currently Amended) A carbon monolith comprising a robust carbon monolith characterized by a skeleton size of at least 100 nm, and a hierarchical pore structure having essentially uniform sized macropores and mesopores on the carbon skeleton, wherein the carbon monolith does not undergo structural collapse at 525,000 times TEM magnification.

2. (Original) A carbon monolith in accordance with claim 1 wherein said carbon monolith is characterized by a skeleton size of 100 nm to 20 μm.

3. (Original) A carbon monolith in accordance with claim 2 wherein said carbon monolith is characterized by a skeleton size of 200 nm to 10 μm.

4. (Original) A carbon monolith in accordance with claim 3 wherein said carbon monolith is characterized by a skeleton size of 400 nm to 1 μm.

5. (Original) A carbon monolith in accordance with claim 1 wherein said macropores are of a size range of 0.05 μm to 100 μm.

6. (Original) A carbon monolith in accordance with claim 5 wherein said macropores are of a size range of 0.1 μm to 50 μm.

7. (Original) A carbon monolith in accordance with claim 6 wherein said macropores are of a size range of 0.8 μm to 10 μm.

8.-9. (Canceled)

10. (Original) A carbon monolith in accordance with claim 9 wherein said mesopores are of a size range of 5 nm to 30 nm.

11. (Canceled)

12. (Currently Amended) A monolithic chromatography column comprising a robust monolithic carbon stationary phase disposed in a chromatography column support, said monolithic carbon stationary phase characterized by a skeleton size of at least 100 nm, and a hierarchical pore structure having essentially uniform sized macropores and mesopores on the carbon skeleton, wherein the carbon monolith does not undergo structural collapse at 525,000 times TEM magnification.

13. (Original) A monolithic chromatography column in accordance with claim 12 wherein said robust monolithic carbon stationary phase is characterized by a skeleton size of 100 nm to 20 μm.

14. (Original) A monolithic chromatography column in accordance with claim 13 wherein said robust monolithic carbon stationary phase is characterized by a skeleton size of 200 nm to 10 μm.

15. (Original) A monolithic chromatography column in accordance with claim 14 wherein said robust monolithic carbon stationary phase is characterized by a skeleton size of 400 nm to 1 μm.

16. (Original) A monolithic chromatography column in accordance with claim 12 wherein said monolithic carbon stationary phase is characterized by a hierarchical porous

structure.

17. (Original) A monolithic chromatography column in accordance with claim 16 wherein said hierarchical porous structure comprises macropores and mesopores.

18. (Original) A monolithic chromatography column in accordance with claim 17 wherein said macropores are of a size range of 0.05 μm to 100 μm.

19. (Original) A monolithic chromatography column in accordance with claim 18 wherein said macropores are of a size range of 0.1 μm to 50 μm.

20. (Original) A monolithic chromatography column in accordance with claim 19 wherein said macropores are of a size range of 0.8 μm to 10 μm.

21. (Original) A monolithic chromatography column in accordance with claim 17 wherein said mesopores are of a size range of 18 Å to 50 nm.

22. (Original) A monolithic chromatography column in accordance with claim 21 wherein said mesopores are of a size range of 0.5 nm to 40 nm.

23. (Original) A monolithic chromatography column in accordance with claim 22 wherein said mesopores are of a size range of 5 nm to 30 nm.

24. (Original) A monolithic chromatography column in accordance with claim 12 wherein said monolithic carbon stationary phase further comprises graphite.

25.-81. (Canceled)